
THE JOURNAL OF BONE & JOINT SURGERY

CONTINUING MEDICAL EDUCATION

CME

REVIEW QUESTIONS

OCTOBER, NOVEMBER, DECEMBER
2007

THIS CME EXAM IS ALSO AVAILABLE AT JBJS.ORG AS AN INTERACTIVE ONLINE EXAM.
CREDITS EARNED BY COMPLETING AND SUBMITTING THIS EXAM ONLINE CAN BE
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MANDATED BY THE ABOS MAINTENANCE OF CERTIFICATION (MOC) PROCESS.

THE DEADLINE TO SUBMIT YOUR ANSWERS FOR GRADING THIS SET OF QUESTIONS IS APRIL 15, 2008.

PURPOSE

The purposes of this CME program are:

- To provide the general orthopaedic surgeon with an ability to assess his or her continuing competence in orthopaedics through the acquisition of contemporary scientific information.
- To provide a broad-based review and update of the major subspecialty areas in orthopaedics.
- To make *The Journal* reader aware of new advances in orthopaedic surgical techniques and technology.

INSTRUCTIONS

In order to benefit most from this educational experience and qualify for Continuing Medical Education credit, please observe the following instructions:

1. Read the learning objectives listed on the Response Form and be certain that they meet your individual learning needs.
2. These CME questions have been derived from the information presented in the October, November, and December issues of the 2007 American volume of *The Journal of Bone and Joint Surgery* (Vol. 89-A). A careful study of each article should yield the best response to each question.
3. Record your answers and complete all portions of the attached Response Form in the back of this document. Upon successful completion of the examination, you may claim up to ten category-1 CME credits. However, to claim up to ten credits to satisfy self-assessment examination requirements mandated by the Maintenance of Certification process, you must take the *online* JBJS quarterly examination.
4. In order for the American Academy of Orthopaedic Surgeons to document your participation in the CME activity, Academy Fellows must provide their AAOS membership number in the designated area on the Response Form.
5. In addition to providing the answers to the CME questions, you must complete the examination evaluation questions. These questions are found on the Response Form. The way you answer these evaluation questions will not in any way affect the score that you achieve.
6. All completed answer sheets will be graded, and you will be advised of the results of this examination within four weeks after it is received. In order to qualify for CME credit, a score of more than 50% correct must be achieved on the examination. A charge of \$45 per quarter, or \$165 per year, must be paid at the time that the answer sheet is submitted. **The deadline to submit your answers for grading this set of questions is April 15, 2008.**

1. The current best option for treating a full-size cartilage lesion (4 cm²) on the medial femoral condyle in the knee is:

- A. microfracture
- B. mosaicplasty
- C. autologous chondrocyte implantation
- D. MACI (autologous chondrocyte implantation with bovine collagen membrane)
- E. there is no evidence of significant differences among the interventions (A, B, C, and D)

2. In a study comparing immobilization in external rotation with immobilization in internal rotation following anterior shoulder dislocation, which of the following statements was found to be most correct:

- A. most patients in both groups sustained the injury in a motor-vehicle accident
- B. a minority of patients treated with immobilization in external rotation returned to sports
- C. a minority of patients treated with immobilization in internal rotation returned to sports
- D. a minority of patients treated with immobilization in external rotation returned to their preinjury sports activity level
- E. a majority of patients treated with immobilization in internal rotation returned to their preinjury sports activity level

3. Which of the following statements best describes the risks of ankle replacement compared with those of ankle fusion?

- A. ankle replacement is associated with a higher long-term risk of the patient requiring subtalar fusion
- B. ankle replacement is associated with a lower risk of a reoperation
- C. ankle replacement is associated with a higher risk of the patient requiring subtalar fusion and a higher risk of a reoperation
- D. ankle replacement is associated with a lower risk of the patient requiring subtalar fusion and a lower risk of a reoperation
- E. ankle replacement is associated with a lower risk of the patient requiring subtalar fusion and a higher risk of a reoperation

4. Postoperative recurrence is one of the common complications of hallux valgus surgery. Which of the following is the most important radiographic finding at the time of early follow-up in that it is associated with subsequent recurrence?

- A. hallux valgus angle
- B. intermetatarsal angle
- C. sesamoid displacement
- D. shape of the lateral edge of the first metatarsal
- E. distal metatarsal articular angle

5. In a recent study, "stuffing" of the patellofemoral joint resulted in what clinical outcome following total knee arthroplasty?

- A. a 20° decrease in the range of motion
- B. a 5-point increase in the pain score
- C. no significant clinical difference

- D. a 7° loss of extension
E. a 20° increase in the range of motion
- 6. A retrieval study of four highly cross-linked polyethylene acetabular liners showed that a key factor in the failure of each of the liners was:**
- A. oxidative degradation of the polyethylene
B. a long shelf life of the bearing before implantation
C. relatively vertical cup alignment and subsequent rim loading
D. rapid abrasive wear of the cross-linked polyethylene
E. third-body debris on the articulating surface
- 7. A patient presents to your office with normal foot radiographs but a suspected ligamentous Lisfranc injury on examination. Which of the following would most likely confirm the diagnosis of a transverse-type injury?**
- A. weight-bearing radiographs
B. abduction stress radiographs
C. computed tomography scan
D. repeat weight-bearing radiographs in one week
E. bilateral comparison non-weight-bearing radiographs
- 8. Current data indicate that expansion of the bone tunnel seen after anterior cruciate ligament reconstruction with use of a tendon graft in a bone tunnel is most likely caused by:**
- A. excessive osteoclastic activity
B. decreased expression of RANKL
C. immune-mediated reaction to allograft tendon
D. excessive OPG activity
E. thermal necrosis of bone caused by tunnel drilling
- 9. Six months after total knee arthroplasty with patellar resurfacing, a seventy-year-old woman with osteoporosis and rheumatoid arthritis presents with anterior knee pain and weakness, which began after she stumbled while tripping over a curb. Before resurfacing, the patellar thickness was 19 mm. After patellar preparation, and before implantation of a three-pegged all-polyethylene patellar component, the patellar thickness was 12 mm. On examination, the patient is able to perform straight-leg raising, with a 5° extensor lag. Radiographs show a fracture of the inferior pole of the patella with 2 mm of displacement and the patellar component firmly fixed to the larger proximal fragment. Treatment should be:**
- A. immobilization in a cast or brace locked in extension for at least six weeks, followed by physical therapy
B. partial patellectomy with removal of the patellar component immediately
C. open reduction and internal fixation with removal of the patellar component and bone-grafting immediately
D. open reduction and internal fixation with retention of the patellar component
E. extensor mechanism allograft
- 10. Which of the following statements characterizes the biomechanical properties of locking plates?**
- A. locking plates function by the use of unicortical screws exclusively
B. locking plates rely on friction between the bone and plate to achieve adequate fracture stability
C. locking plates are considered as “internal fixators” because of their angular-stable interface between the screw head and the plate
D. locking plates should be used in a bridging technique only
E. locking plates generally lead to fracture healing by the compression principle
- 11. While some differences in muscle strength and function are inherent between men and women, women are more adversely affected by osteoarthritis than men are, as manifested by:**
- A. radiographic evidence of more severe disease
B. a greater difference in the results of strength and functional tests for candidates for arthroplasty
C. a lesser difference in strength and functional test results for candidates for arthroplasty
D. a higher body mass index and slower walking times for female candidates for arthroplasty
E. worse outcomes on patient self-report measures for female candidates for arthroplasty
- 12. Intra-articular fractures of the distal part of the radius are more common in non-osteoporotic bone than in osteoporotic bone and may be associated with intercarpal ligamentous injury. What prevalence of scapholunate ligament injury can be expected in patients with a displaced intra-articular fracture of the distal part of the radius in non-osteoporotic bone?**
- A. <25%
B. 25% to 40%
C. 41% to 60%
D. 61% to 80%
E. >80%
- 13. Which of the following protocols for tensioning posterolateral corner grafts best restored normal knee posterior cruciate ligament graft forces in response to a 5-N-m external tibial torque?**
- A. lateral collateral ligament graft tensioned to 10 N and popliteus graft tensioned to 10 N
B. lateral collateral ligament graft tensioned to 30 N and popliteus graft tensioned to 30 N
C. lateral collateral ligament graft tensioned to 10 N and popliteofibular ligament graft tensioned to 10 N
D. lateral collateral ligament graft tensioned to 30 N and popliteofibular ligament graft tensioned to 30 N
E. lateral collateral ligament graft tensioned to 10 N
- 14. Thermal injuries from plaster cast application may be avoided by which of the following?**
- A. resting the plaster cast on a pillow while the plaster cures

- B. folding the edges of a long plaster cast back on themselves
 C. using dip water with a temperature of <math><24^{\circ}\text{C}</math>
 D. immediately overwrapping the plaster cast with fiberglass casting tape
 E. applying alcohol to a cast that feels too warm
- 15. Which of the following factors was the most predictive of a recurrent tear following repair of a traumatic combined rotator cuff tear involving the subscapularis tendon?**
- A. operative procedure (open or arthroscopic)
 B. degree of tendon retraction
 C. postoperative management
 D. shape of coracoid process
 E. time from injury to repair
- 16. Compared with bracing in valgus alignment, bracing in neutral alignment for the treatment of patients with medial compartment knee osteoarthritis results in:**
- A. more pain
 B. worse patient self-reported scores
 C. higher cocontraction values
 D. better pain, disability, and cocontraction values
 E. equivalent or better reductions in self-reported knee pain and functional disability
- 17. The prevalence of obesity in ambulatory children with cerebral palsy:**
- A. has increased more rapidly than the prevalence in the general pediatric population since 1994
 B. has not changed since 1994
 C. has decreased since 1994
 D. has increased at a rate that is similar to that in the general pediatric population since 1994
 E. is not related to functional level as determined by the Gross Motor Function Classification System (GMFCS)
- 18. In the course of surgery for correction of adolescent idiopathic scoliosis you are told that the transcranial electric motor evoked potential amplitudes decreased by 75%. The mean arterial pressure is 55 mm Hg. With no changes in the somatosensory evoked potential amplitudes, which of the following interventional strategies should you explore first?**
- A. termination of the surgery
 B. a wake-up test
 C. institution of a surgical pause and raising the mean arterial blood pressure to 90 mm Hg
 D. continuation of the surgery on the basis of the unchanged somatosensory evoked potential amplitudes
 E. removal of the construct
- 19. eNOS polymorphisms can act alone or synergistically with cigarette smoking as genetic risk factors for idiopathic osteonecrosis in some patients or can act in concert with thrombophilia and/or hypofibrinolysis, which are documented pathoetiologies for osteonecrosis. Which one of the following statements is correct?**
- A. acting through nitric oxide production, eNOS polymorphisms are genetic risk factors for idiopathic osteonecrosis
 B. eNOS polymorphisms are genetic risk factors for idiopathic osteonecrosis only in cigarette smokers
 C. the association of eNOS polymorphisms and idiopathic osteonecrosis is speculative
 D. eNOS polymorphisms are associated with idiopathic osteonecrosis solely through their effects on thrombophilia and/or hypofibrinolysis
 E. eNOS polymorphisms are associated with idiopathic osteonecrosis only in men
- 20. Several techniques have been proposed for substitution of subscapularis muscle function with use of a musculotendinous transfer. Which of the following best explains the improved performance of a pectoralis major transfer when it is routed underneath the conjoined tendon rather than above the conjoined tendon?**
- A. the line of action of the transferred tendon
 B. the moment arm of the transferred tendon
 C. the force-generating capability of the pectoralis major
 D. the amount of excursion of the transferred tendon during abduction
 E. the physiological cross-sectional area of the transferred muscle
- 21. A fifty-year-old man presents with a limp, pain with internal rotation at 90° of flexion of the hip, and radiographic findings of a pistol grip deformity of the hip with complete loss of cartilage. The recommended operation is:**
- A. diagnostic arthroscopy of the hip
 B. arthrotomy with labral repair
 C. Bernese pelvic osteotomy
 D. total hip replacement
 E. observation and anti-inflammatory medication
- 22. A twenty-seven-year-old man with substantial left-sided spasticity following closed head trauma has a progressively worsening bunion deformity that is interfering with his ability to walk. The hallux valgus angle measures 42° and the intermetatarsal angle measures 17°. The treatment of choice is:**
- A. resection arthroplasty of the hallux metatarsophalangeal joint (Keller procedure)
 B. surgical correction with double osteotomy of the first metatarsal and distal soft-tissue rebalancing
 C. surgical correction by arthrodesis of the first metatarsophalangeal joint and osteotomy of the first metatarsal
 D. surgical correction by arthrodesis of the first metatarsophalangeal joint
 E. amputation of the hallux
- 23. In addition to being associated with significantly lower rates of secondary interventions in patients with an open fracture, use of bone morphogenetic proteins, such as rhBMP-2, is associated with which of the following?**
- A. a significantly higher infection rate

- B. a significantly lower infection rate
 C. no difference in the infection rate
 D. an increased trend toward more infection
 E. none of the above
- 24. A meta-analysis based only on randomized trials was performed to compare the results of ulnar nerve decompression with those of ulnar nerve transposition for the treatment of ulnar neuropathy. The authors found:**
- A. ulnar nerve decompression to be superior
 B. ulnar nerve transposition to be superior
 C. no significant difference between the two procedures in terms of postoperative conduction velocity or clinical scores
 D. a significantly better conduction velocity in patients who had undergone ulnar nerve decompression
 E. significantly better clinical scores for patients who had undergone ulnar nerve transposition
- 25. Octogenarian patients undergoing revision total hip arthroplasty are likely to have higher complication rates than younger patients in all of the following categories except:**
- A. cardiovascular events
 B. periprosthetic fracture
 C. periprosthetic infection
 D. dislocation
 E. anemia
- 26. The decision to transfer a patient with a femoral fracture to a designated trauma center was found not to be influenced by:**
- A. available orthopaedic call coverage
 B. injury complexity represented by the Injury Severity Score
 C. patient insurance coverage
 D. patient age
 E. mechanism of injury
- 27. A seventy-two-year-old man who fell presents with radiographs that reveal a fracture of the femur proximal to the tip of an uncemented femoral component of a total knee prosthesis. No loosening or osteolysis is seen. According to the Vancouver classification, this fracture is best classified and treated as:**
- A. Type A, treated with open reduction and internal fixation
 B. Type B1, treated with revision arthroplasty
 C. Type B2, treated with revision arthroplasty
 D. Type B1, treated with open reduction and internal fixation
 E. Type C, treated with open reduction and internal fixation
- 28. A high body mass index is often considered by orthopaedic surgeons to be a contraindication for total hip replacement. Which of the following statements regarding the results following metal-on-metal total hip arthroplasty is most accurate?**
- A. the postoperative quality-of-life scores were better for patients with a high body mass index compared with patients with a low body mass index
 B. the risk of revision decreased as the mean body mass index increased
 C. the postoperative Harris hip scores were better for patients with a high body mass index compared with patients with a low body mass index
 D. the postoperative activity scores were better for patients with a high body mass index compared with patients with a low body mass index
 E. the postoperative pain scores were better for patients with a high body mass index compared with patients with a low body mass index
- 29. A simple model of the patellofemoral joint in which only the line of action of the extensor mechanism is considered would predict that the patellae of varus knees track medially and the patellae of valgus knees track laterally. For which three-dimensional patellar kinematic parameter(s) did this hold true?**
- A. tilt and spin
 B. spin
 C. lateral translation
 D. spin and lateral translation
 E. tilt
- 30. Complete fusion of the olecranon and all other elbow physes represents an important landmark of skeletal maturity during the pubertal growth spurt. It indicates:**
- A. the beginning of peak height velocity
 B. the end of growth
 C. that triradiate cartilage closure will occur within the next six months
 D. the end of accelerating and the beginning of decelerating height velocity
 E. that menarche has already occurred
- 31. Use of a distal tibial turn-back flap may be a suitable salvage procedure for patients with a severe open tibial fracture under all of the following conditions except:**
- A. an open fracture with diaphyseal bone loss
 B. a patient who is a poor candidate for free soft-tissue transfer
 C. extensive bone loss in the proximal metaphyseal-diaphyseal tibial area
 D. injury to the posterior tibial artery
 E. viable soft tissue of the posterior aspect of the leg and foot
- 32. Which of the following statements concerning patellofemoral replacement prostheses is most accurate?**
- A. earlier designs were reported to have consistently good results
 B. recent designs were reported to have promising results at two to five years
 C. malalignment and instability were not problems with earlier designs
 D. younger patients with patellar malalignment and early osteoarthritis of the patellofemoral

- articulation are good candidates for patellofemoral replacement
- E. an indication for this procedure is patellofemoral involvement and rheumatoid arthritis currently controlled with anti-rheumatic medications
- 33. Histopathologic interpretation of lesional grade by specialized pathologists has the lowest reliability among which of the following disease entities?**
- A. breast carcinoma
B. melanoma
C. osteosarcoma
D. chondrosarcoma
E. soft-tissue sarcoma
- 34. Potential legal barriers to recertification of external fixation systems by hospitals and third-party recyclers have previously included all of the following EXCEPT:**
- A. reused frames were ineffective clinically
B. strict liability
C. negligence
D. breach of warranty
E. intellectual property claims
- 35. Patients treated with total knee arthroplasty with an uncemented hydroxyapatite-coated tibial implant may experience:**
- A. pain and function similar to those experienced by patients treated with cemented tibial fixation throughout the first five postoperative years
B. more pain but better function than those treated with cemented tibial fixation
C. less pain but worse function than those treated with cemented tibial fixation
D. more pain during the initial six months than those treated with cemented tibial fixation but no difference at five years postoperatively
E. more pain during the initial six months than those treated with cemented tibial fixation and inferior results at five years postoperatively
- 36. The human clavicle is:**
- A. a straight bone
B. c-shaped
C. s-shaped with anteromedial and posterolateral angulation
D. s-shaped with posteromedial and anterolateral angulation
E. s-shaped with superomedial and inferolateral angulation
- 37. Which is not a major factor that needs to be considered when deciding what type of treatment is necessary for a periprosthetic patellar fracture after total knee arthroplasty?**
- A. implant stability
B. fracture displacement and pattern
C. integrity of the extensor mechanism
D. presence of symptoms
E. whether a central peg or three-pegged patellar component was used
- 38. What is the most likely causative factor for heterotopic ossification in a patient who has sustained multiple traumatic injuries and remains in intensive care for a prolonged period?**
- A. high serum calcium levels
B. head trauma
C. ISS (injury severity score) of >8
D. prolonged pharmacological paralysis during mechanical ventilation
E. long-bone fracture treated nonoperatively
- 39. In vitro measures of suture and graft isometry in a popliteus tendon reconstruction suggest that the optimal tunnel position for the graft, resulting in the least amount of graft excursion on the femoral condyle, is:**
- A. posterior and proximal to the footprint of the native popliteus tendon attachment
B. anterior and distal to the footprint of the native popliteus tendon attachment
C. posterior and distal to the footprint of the native popliteus tendon attachment
D. anterior and proximal to the footprint of the native popliteus tendon attachment
E. at the native popliteus tendon attachment
- 40. Which of the following locations has the highest peak temperatures after typical application of a circumferential plaster cast?**
- A. the heel region of a below-the-knee plaster cast
B. the patellar region of an above-the-knee cylinder cast
C. the dorsum of the forearm of a below-the-elbow waterproof fiberglass cast
D. the anterior ankle region of a below-the-knee plaster cast
E. over the olecranon in an above-the-elbow plaster splint of appropriate length
- 41. Sensitivity analyses performed as part of a decision analysis model help predict the impact of the input variables on the overall cost-effectiveness. Which of the following scenarios would improve the cost-effectiveness of computer-assisted surgery for total knee arthroplasty?**
- A. increased cost of computer navigation equipment
B. increased alignment with mechanical alignment guides
C. younger patient population
D. decreased rate of component failure with coronal malalignment with mechanical guides
E. decreased alignment with computer-assisted surgery
- 42. The addition of which of the following to the site of an opening wedge tibial osteotomy most enhanced healing:**
- A. autologous tibial cancellous bone
B. autologous bone-marrow stromal cells
C. lyophilized allograft bone chips
D. lyophilized allograft bone chips and autologous platelet gel
E. lyophilized allograft bone chips, autologous

platelet gel, and autologous bone-marrow stromal cells

43. The most significant preoperative factor associated with the development of non-neurologic complications following surgery for adolescent idiopathic scoliosis is:

- A. prolonged anesthesia time
- B. abnormal results of pulmonary function tests
- C. history of renal disease
- D. blood loss
- E. number of levels fused

44. A thirty-year-old man presents with intermittent hip pain after athletic activity, pain with flexion and internal rotation of the hip, and a magnetic resonance imaging scan that shows an abnormal head-neck morphology and an anterosuperior labral tear with normal cartilage. The best treatment is:

- A. diagnostic arthroscopy of the hip
- B. arthrotomy of the hip with resection of 20% of the head-neck diameter and labral repair
- C. surface replacement of the hip
- D. conventional total hip replacement
- E. observation

45. A thirty-seven-year-old woman seeking surgical revision is seen two years following bunion surgery. She reports pain and discomfort while wearing dress shoes and while running. She is asymptomatic when wearing sandals and walking shoes. Clinical examination reveals a tender callus over the medial aspect of the first metatarsophalangeal joint and the lateral aspect of the fifth metatarsophalangeal joint. Dorsiflexion of the hallux is painless without crepitation, and the hallux extends easily to 60°. Weight-bearing radiographs show the hallux valgus angle to be 14°, the intermetatarsal angle to be 9°, and no arthritic changes. The treatment of choice is:

- A. revision bunionectomy with more aggressive medial eminence resection and proximal phalangeal osteotomy
- B. arthrodesis of the first metatarsophalangeal joint
- C. arthroscopic débridement of the first metatarsophalangeal joint
- D. shoes with a wider toe box and with soft leather uppers and activity modification
- E. Keller resection arthroplasty

46. In comparison with a conventional physical therapy regimen consisting of delayed initiation of motion, early passive supervised mobilization of the shoulder for nonoperative treatment of impacted proximal humeral fractures resulted, at three months postinjury, in:

- A. a significant increase in pain
- B. a significant increase in the Constant score
- C. a significant increase in nonunion
- D. a significant increase in displacement
- E. a significant increase in satisfaction

47. The successful administration of peripheral nerve blocks depends on a thorough knowledge of anatomic landmarks and their relationship to target nerves. In the proximal portion of the thigh, the femoral nerve is bordered by which of the following structures?

- A. the pubic tubercle and the femoral vein
- B. the femoral artery and the adductor longus muscle
- C. the sartorius and tensor fasciae latae muscles
- D. the femoral artery and the sartorius muscle
- E. the pectineus muscle and the femoral artery

48. Which of the following statements regarding patellofemoral contact area and pressure with double-stance kneeling following total knee arthroplasty is correct?

- A. patellofemoral contact area and pressure decrease with kneeling
- B. patellofemoral contact pressure increases and patellofemoral contact area decreases with kneeling
- C. kneeling at high flexion angles (>135°) results in reduced patellofemoral contact area and pressure compared with those at lower flexion angles (<120°)
- D. kneeling at high flexion angles (>135°) has a greater effect on patellofemoral contact area and pressure than does kneeling at lower flexion angles (<120°)
- E. kneeling does not have a significant effect on patellofemoral contact area and pressure

49. An important factor to consider when comparing wear of highly cross-linked polyethylene liners with wear of conventional ones is:

- A. the thickness of the polyethylene liner
- B. the type of traditional polyethylene used for comparison
- C. the sex of the patient
- D. the presence of hydroxyapatite coating on the acetabular component
- E. the fatigue crack propagation characteristics of the femoral head

50. In a sheep model, a mixture of osteoinductive growth factors improved the attachment strength of a repaired rotator cuff tendon by which mechanism?

- A. formation of a greater volume of fibrovascular scar tissue at the tendon attachment site
- B. regeneration of a normal direct tendon insertion
- C. decreased gap formation between the repaired tendon and bone
- D. improved collagen fiber continuity between the tendon and bone
- E. greater cell proliferation in the healing tendon

Conflict of Interest

The author of these CME questions does not have any financial conflict of interest with regard to the subject matter discussed in these review questions.

RESPONSE FORM

EXAMINATION EVALUATION

Did the January 2007 CME Review Questions meet these educational objectives*:

1. Provide a broad-based review and update specifically in the areas of orthopaedic rehabilitation, sports medicine and knee surgery? Yes No
2. Strengthen your problem-solving abilities related to patient care particularly in the areas of sports medicine and knee surgery? Yes No
3. Make you aware of new advances in orthopaedic surgical techniques and technology? Yes No

Comments (please comment on the quality of the questions and their relationship to your practice): _____

*Note: These objectives will change every quarter.

SURVEY (optional)

1. Which of the following best describes your practice type?
 - General orthopaedics
 - General orthopaedics with subspecialty interest
 - Exclusively subspecialty
 - Resident or student
 - Researcher
 - Other: _____
2. What are your specialty interests? Please rank in order of importance (1 = highest importance).

____ Adult	____ Spine
____ Geriatric	____ Hand
____ Pediatric	____ Rheumatology
____ Rehabilitation	____ Foot and Ankle
____ Sports	____ Other: _____
____ Trauma	
3. Which is your number-one priority to read when you receive *The Journal* (American volume only) each month?
 - Commercial advertising
 - Current Concepts
 - Classified advertising
 - Letters to The Editor
 - Clinical scientific articles
 - Basic scientific articles
 - Orthopaedic Forum
 - Instructional Course Lectures

ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the American Academy of Orthopaedic Surgeons (AAOS) and *The Journal of Bone and Joint Surgery* (JBJS). The AAOS is accredited by the ACCME to provide continuing medical education for physicians. The AAOS designates this educational activity for up to 10 hours of category-1 credit toward the AMA Physicians' Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

The deadline to submit your answers for grading this set of questions is April 15, 2008.

QUESTIONS?

For payment questions, contact the Subscription Department at 781-449-9780, x1240. For questions regarding submitted tests, contact Melissa Viola at 781-449-9780, x1224. E-mail all other questions to cme@jbjs.org.

ANSWER KEY

Black out the correct answers

- | | | |
|---------------|---------------|---------------|
| 1. A B C D E | 18. A B C D E | 35. A B C D E |
| 2. A B C D E | 19. A B C D E | 36. A B C D E |
| 3. A B C D E | 20. A B C D E | 37. A B C D E |
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| 5. A B C D E | 22. A B C D E | 39. A B C D E |
| 6. A B C D E | 23. A B C D E | 40. A B C D E |
| 7. A B C D E | 24. A B C D E | 41. A B C D E |
| 8. A B C D E | 25. A B C D E | 42. A B C D E |
| 9. A B C D E | 26. A B C D E | 43. A B C D E |
| 10. A B C D E | 27. A B C D E | 44. A B C D E |
| 11. A B C D E | 28. A B C D E | 45. A B C D E |
| 12. A B C D E | 29. A B C D E | 46. A B C D E |
| 13. A B C D E | 30. A B C D E | 47. A B C D E |
| 14. A B C D E | 31. A B C D E | 48. A B C D E |
| 15. A B C D E | 32. A B C D E | 49. A B C D E |
| 16. A B C D E | 33. A B C D E | 50. A B C D E |
| 17. A B C D E | 34. A B C D E | |

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